AMENDMENTS TO THE CLAIMS

1. (Previously Presented) A transmission line, said line comprising:

a first primary conductor;

a first auxiliary conductor inductively coupled to said first primary conductor;

first non-inverting amplification component with an input connected to said primary conductor and an output connected to said first auxiliary conductor, said first amplification component distributed along the length of said transmission line; and

a ground conductor.

2. (Previously Presented) The transmission line of claim 1 wherein said first non-inverting amplification component comprises amplification stages, each stage comprising:

a first transistor having its gate connected to said first primary conductor, its drain connected to said ground conductor, and its source connected to the source of a second transistor; and

said second transistor having its gate connected to a reference voltage input, its drain connected to said first auxiliary conductor and through a conductance to said ground conductor.

3. (Original) The transmission line of claim 2 further comprising:

a current sink connected to said sources of said first and second transistor.

4. (Previously Presented) The transmission line of claim 1 wherein said first non-inverting amplification component comprises non-inverting amplifiers at spaced intervals along said transmission line.

5. (Original) The transmission line of claim 4 wherein said spaced intervals are equal.

6. (Previously Presented) The transmission line of claim 1 further comprising:

a second primary conductor parallel to and spaced apart from said first primary conductor;

a second auxiliary conductor inductively coupled to said second primary conductor; and

second non-inverting amplification component with an input connected to said second primary conductor and an output connected to said second auxiliary conductor, said second amplification component distributed along the length of said transmission line.

7. (Previously Presented) A differential transmission line, said transmission line comprising:

first and second primary conductors;

a first auxiliary conductor inductively coupled to said first primary conductor;

a second auxiliary conductor inductively coupled to said second primary conductor;

first inverting amplification component with an input connected to said first primary conductor and an output connected to said second auxiliary conductor; and

a second inverting amplification component with an input connected to said second primary conductor and an output connected to said first auxiliary conductor, said first amplification component and second amplification component distributed along said transmission line.

8. (Previously Presented) The differential transmission line of claim 7 wherein said first amplification component and said second amplification component comprise inverting amplifiers spaced along said primary conductors.

9. (Original) The differential transmission line of claim 7 wherein each said amplifier comprises:

a transistor and wherein the sources of said transistors are connected together and are also connected to a bias input.

10. (Original) The differential transmission line of claim 9 wherein said bias input is a current source.

11. (Original) The differential transmission line of claim 7 further comprising:

terminations to avoid reflections.

12. (Currently Amended) A method for transporting an a.c. signal, said method comprising:

propagating the a.c. signal along a first primary conductor;

coupling said propagating a.c. signal from said first primary conductor to a first auxiliary conductor along the length of said first primary conductor; and

establishing both conductance and transconductance between said first auxiliary conductor and a ground conductor; and

wherein said coupling includes inductive coupling.

13. (Cancelled)

14. (Original) The method of claim 12 further comprising:

propagating a differential signal differential to said a.c. signal along a second primary conductor;

coupling said propagating differential signal from said second primary conductor to a second auxiliary conductor along the length of said second primary conductor; and

establishing both conductance and transconductance between said second auxiliary conductor and said ground conductor.

15. (Original) The method of claim 14 additionally comprising:

controlling the transconductance associated with said second auxiliary conductor with said signal coupled to said first auxiliary conductor; and

controlling the transconductance associated with said first auxiliary conductor with said differential signal coupled to said second auxiliary conductor.

16. (Original) The method of claim 14 wherein said establishing comprises:

distributing said conductance and transconductance along the length of said primary and auxiliary conductors.

17. (Original) The method of claim 14 wherein said establishing comprises:

lumping said conductance and transconductance at locations along the length of said primary and auxiliary conductors.

18. (Original) The method of claim 17 additionally comprising:

equally spacing said locations.

19. (Original) The method of claim 12 wherein said conductance is inductively established.

20. (Original) The method of claim 12 wherein further comprising:

terminating said propagating a.c. signal to avoid reflections.